Energy Fortnightly News

February 15-29, 2024

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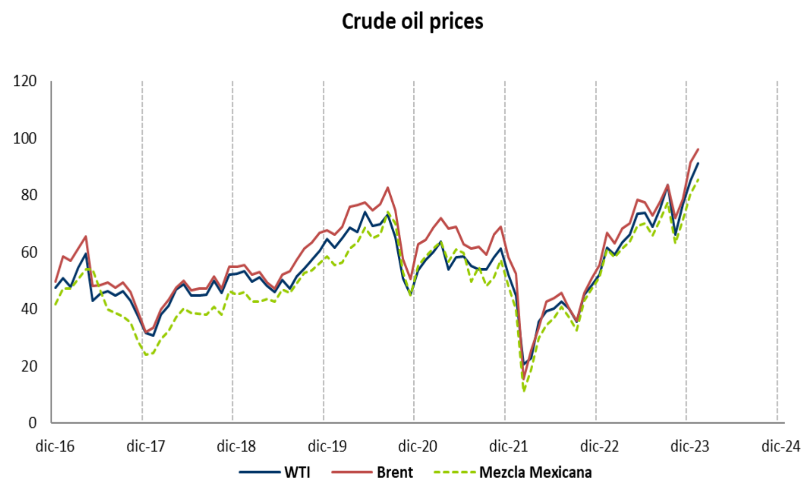
Fortnightly review

** 28/02/2024*

MME US/BD*	73.60
MME US/BD* PEF SHCP	56.30
Dif. MME AVG. 2024 vs. MME PEF SHCP	13.20
NG price HH* US/MMBTU	1.87
Mx crude production MMbd – *January*	1.60
Mx NG production MMpcd – *January*	4,070
US crude production MMbd - *November*	13.30
FX Rate*	17.09



Source: EIA. El Reforma, Pemex, Banxico, and CNH

Oil & Gas - Mexico

Pemex Q4 2023 results – *Pemex, Reuters*

Pemex posted revenues of 425.5 billion pesos in the 4Q23, 17.4% lower than in 4Q22, due to a 19.9% decrease in domestic sales and a 14.3% decrease in export sales. Pemex reported a fourth quarter net profit of 106.9 billion pesos, versus a net loss of 95.5 billion pesos in the year earlier period but its overall debt burden remained the highest of any oil company in the world, with billions of dollars due to bond holders and service providers.

Crude oil and condensate production reached 1.86 million bpd, with 566,300 bpd pumped from new fields. Total natural gas production (including production from partners) decreased by 32 MMcfd, equivalent to 0.8%, to 3,954 MMcfd. In the fourth quarter of 2023, the crude oil processing averaged 731 Mbd, due to a lower process at the Madero, Salina Cruz, and Tula refineries since the scheduled rehabilitation works in the combined and primary plants took longer than estimated. Consequently, primary distillation utilization averaged 44.6%, outstanding the utilization recorded at the Tula, Cadereyta, and Salamanca refineries, with rates of 57.3%, 51.4%, and 47.3%, respectively. As a result, petroleum products production averaged 738 Mbd, of which 388 Mbd (52.5%) were distillates (gasoline, diesel, and jet fuel).

Pemex's total financial debt stood at $106.1 billion at the end of last year. Debt to providers exceeded 359 billion pesos, up 27.5% from the end of the previous year and the highest ever recorded, even after the company paid 413.9 billion pesos to providers throughout 2023. Pemex received 127.7 billion pesos in financial support from the government, and 25 billion pesos of that went toward the Dos Bocas refinery. Much of the rest was used to pay down debt.

Pemex to increase investments, production at Palmito legacy field – *Bnamericas*

CNH has approved modifications to Pemex's development plan for the Palmito conventional legacy field in Nuevo León state. With the approved changes, PEP will now allocate US $114 million, or U S$74.4 million more than what was approved in 2014. PEP planned to extract 1.2Bf3 of gas between 2024 and 2029 but now aims at 56.5Bf3 by 2049. PEP intends to drill 17 new wells.

Palmito is an all-gas field that began production in 1965. By 2014, the field had 65 wells operating, following its production peak in 2012, when the 46Tf3 extraction record was broken. Although production declined after that, three new wells were drilled in 2023, resulting in positive results that led to the change in the development plan.

Pemex doubles Zapoteco crude oil exports in three months – *Oil and Gas Magazine*

Pemex witnessed a significant surge in exports of its light crude oil named Zapoteco, doubling its export volumes in just three months since its introduction in 2023. The company's latest figures show that by December, it had reached exports of up to 64Mb/d of Zapoteco, a stark increase from the 32Mb/d exported in October when the exports of this new type of oil commenced.

Introduced by the company in August 2023, Zapoteco boasts an American Petroleum Institute (API) grade ranging between 29 and 29.9, these exports generated revenues of US $223 million in the last year alone, with the oil fields in southern Mexico, particularly the new reservoirs, serving as primary sources of this super-light crude.

Crude oil is classified based on API grades, with values below 22 being heavy, between 22 and approximately 31 classified as light, and above 31 defined as super-light. In Mexico, excluding Zapoteco, production is divided into three types of oil based on its density: Olmeca, Istmo and Maya. Olmeca is considered "extra light" crude due to its characteristics, making it a good producer of lubricants and petrochemicals. Istmo crude, is considered "light" and yields more gasoline and intermediate distillates. Finally, Maya crude, being "heavy," has a lower yield in gasoline and diesel production.

Recently, Pemex resumed exports of super-light oil, an easily refined hydrocarbon, after six years since the last shipment from Mexico. The last time Pemex exported super-light crude was in August 2017, when it sent 49.3Mb/d. Olmeca oil accounts for 11% of the 1.57MMb/d produced by Pemex daily and only 5% of the total exported by the Mexican company. By the end of 2023, Zapoteco exports accounted for 6% of the company's total international sales, with Maya crude covering 56% and Istmo 38%. Like Zapoteco, Olmeca is lighter and commands a high value in international markets.

Mexico's oil production hits year lowest – *El Financiero*

The country's oil production started the year on the 'left foot' as it accumulated five months of contractions during January 2024. CNH reported an average crude oil production of 1.60MMb/d, a 2.7% decrease from a year earlier.

Pemex and its partners produced 1.882 thousand barrels per day of liquid hydrocarbons, that is, crude oil plus condensates, 95% of this production was contributed by PEP, while the remaining 5% was a private contribution. The main liquid hydrocarbon fields were Maloob (324 thousand barrels per day), Zaap (179 mbd), Quesqui (178 mbd), Tupilco Profundo (105 mbd), Ayatsil (82 mbd), Balam (60 mbd) and Ixachi (48 mbd). These seven fields provide 52 percent of the country's liquid hydrocarbons.

The number of operational oil and gas wells has decreased by 127 over the past year, resulting in a total of 6,880 wells, both onshore and offshore. This decline underscores the ongoing challenges facing Mexico's oil and gas sector, highlighting the need for continued efforts to stabilize and boost production in the face of natural decline and external factors.

CNH approves Pemex's Santiago 101-EXP well exploration plan – *CNH*

CNH has greenlit the drilling of the terrestrial exploratory well Santiago 101-EXP for PEP. The well is part of the Assignment AE.0387-5M-Humapa. Scheduled to commence on May 28 and conclude on Aug. 14, the well's drilling is estimated to cost US$10 million and span a duration of 79 days. The primary objective of the well is to discover commercially viable light oil. PEP anticipates recovery of 1.8MMboe, with a geological success probability of 44%.

US regulators approve Mexico Pacific LNG's Saguaro connector pipeline – *Reuters*

U.S. energy regulators approved a cross-border pipeline that would export about 2.8 billion cubic feet per day of natural gas from Texas to Mexico Pacific's Saguaro LNG export plant on Mexico's west coast.
The approval is another step in the company's plan to build an about $15 billion LNG plant in Mexico that would export superchilled fuel processed from U.S. natural gas. Mexico Pacific LNG has yet to give the financial greenlight for the construction of the 15 million metric ton per annum plant.

Ruling by the Federal Energy Regulatory Commission on the construction of the Saguaro Connector Pipeline comes weeks after the Biden administration paused export permit reviews by the Department of Energy. The administration wants the DOE to consider plants' climate, consumer, and community impacts in its deliberations. The cross-border pipeline has been opposed by Texas groups including environmental campaigner the Sierra Club that have argued FERC should consider greenhouse gas emissions including possible methane leaks.

Power/Renewable Energy – Mexico

CRE Introduces EnerGeoCRE for energy sector permits – *Business Mexico News*

CRE launched a new technological tool named "EnerGeoCRE," aimed at enhancing operational and regulatory management processes within the energy sector. EnerGeoCRE serves as an information hub, providing valuable insights to stakeholders engaged in regulated activities within the energy industry. It offers free access to comprehensive data for both internal analysis by regulatory authorities and external use by interested parties seeking permits.

EnerGeoCRE is expected to streamline the permit issuance process and provide participants in energy markets with a descriptive guide. It will facilitate geographical management of permits based on market demand and end-user needs, fostering efficiency and transparency in the sector. While the information provided by EnerGeoCRE is non-binding to applicants, it serves as a valuable decision-making support tool. By leveraging this technology, stakeholders can navigate the energy landscape more effectively, contributing to the sector's overall development and sustainability.

The launch of EnerGeoCRE comes as the sector struggles with several regulation problems. While CRE tries to advance on regularizing the sector, permit holders have expressed concerns over potential millionaire fines and an arbitrary approach to inspections and enforcement of fines. Only six companies in Mexico are authorized to import diesel and legally distribute it in the national territory, with five of them being firms from the United States. Since 2018, transporters and companies have been required to procure imported fuel exclusively from a limited group of permit holders, including Pemex and the five US firms.

ExxonMobil, Koch Supply, Shell México, Tesoro México, and Valero Marketing were each granted authorization at the end of 2018 for diesel distribution, valid for 20 years until the end of 2038. While the government struggles to reduce fuel theft, illegal sellers have found opportunity in the challenges of the energy sector. Meanwhile, many permits have been denied and remain stuck, after a bottleneck in permit processing was created approximately two years into the pandemic, leaving large amounts of investment stranded.

Sonora government, ENGIE Mexico unveil Akin Solar Park – *Energía a debate*

The government of Sonora, in collaboration with ENGIE Mexico, recently inaugurated Akin Solar Park in the municipality of Puerto Libertad. With an investment of US $112 million, the plant boasts 390,000 solar panels capable of generating up to 100MW. Over 2,300 jobs were created during its construction phase.

ENGIE, explained that the energy generated by Akin Solar Park will be introduced to the National Electric System, contributing to Mexico's energy matrix diversification.

Oil & Gas - LATAM

Baker Hughes inks contract with Petrobras to service Buzios – *Baker Hughes Press Release*

Baker Hughes has secured a contract with Petrobras for integrated well construction services in the Buzios field offshore Brazil. The integrated services project is set to start in the first half of 2025 and will include drilling services, drill bits, wireline, cementing, wellbore clean up, fishing, remedial tools, fluids, services and geosciences.

During the first phase of field development, Baker Hughes has played a critical role in Buzios field, providing advanced technology and equipment. In addition to providing drilling, completions and wireline services, the company supplied WAG manifolds (water and gas) and more than 240 kilometers of flexible pipes, including production lines, gas lift, water injection, and gas injection flexible pipes for use in 2,000-meter water depth. Baker Hughes also supplied turbomachinery for 10 of the 11 FPSOs, including turbogenerators, motocompressors and turbocompressors plus condition monitoring, detection and fault protection on critical machines.

The Búzios oilfield is in the Santos Basin, southeast offshore Brazil, with an average water depth of approximately 2,200 meters. It is the world's largest deep-water pre-salt producing oil field, according to the news release. It uses the traditional deepwater pre-salt development mode, which includes an FPSO and subsea facilities. FPSO Almirante Barroso is located 112 miles off the coast of Rio de Janeiro and operates its production in a water depth of 1,900 meters. It is the fifth platform to start operating in the Búzios field, the company said.

Petrobras operates the shared Búzios field with an 88.99% stake, with China's state-owned energy firms CNOOC and CNODC holding 7.34% and 3.67%, respectively.

FPSO heads for Petrobras' Mero field offshore Brazil – *Rigzone*

Marechal Duque de Caxias, a floating production, storage, and offloading unit (FPSO) chartered by Petrobras from MISC, is headed for the Mero field in the pre-salt layer of the Santos Basin offshore Brazil.

The platform will start operating in September and has the capacity to produce up to 180,000 barrels per day (bpd) of oil and compress up to 12 million cubic meters of gas per day, the company said in a recent news release. The unit will be part of Mero's third production system and will increase the field's installed production capacity to 590,000 bpd of oil. The production system includes the interconnection of 15 wells to the unit, eight oil producers, and seven water and gas injectors using underwater infrastructure.

Mero is the third largest field in Brazil in terms of volume of oil in place, behind only Tupi and Búzios, also located in the pre-salt Santos Basin. In addition to the Duque de Caixas FPSO, Petrobras said it will put another unit into operation in Mero in 2025. FPSO Sepetiba, the second definitive production system of the Mero field, came onstream in December 2023, while the first system FPSO Guanabara came online in April 2023. Petrobras operates the Mero unitized field with a 38.6% stake. Its consortium partners are Shell Brasil, with a 19.3% stake; TotalEnergies, with 19.3%; CNOOC with 9.65%; CNPC with 9.65%; and Pré-Sal Petróleo S.A. with 3.5%.

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